

## **ETL Joins with NWS' Office of Hydrologic Development to Co-lead Planning of a NOAA Hydrometeorological Testbed (HMT)**

**Overarching goal of the Hydrometeorological Testbed: *Improving NOAA's flood warnings and precipitation forecasts by accelerating critical R&D and its transition to operations based on real-world evaluation of prototype observing systems and forecast techniques.***

### **Summer 2002:**

The Hydrology Team of the joint OAR/NWS Science and Technology Infusion Planning activity recommended NOAA establish a Hydrometeorological Testbed to help NOAA meet its hydro-related GPRA goals.

### **November 2002:**

On November 20, 2002, more than 30 NOAA and NOAA Joint Institute hydrologic and meteorological researchers and forecasters attended a meeting to begin planning a Hydrometeorology Testbed. The meeting was co-led by OAR (ETL) and NWS (OHD) and participants represented several components of NOAA with a stake in hydrometeorology such as NWS Weather Forecast Office and River Forecast Centers, NWS Offices of Hydrologic Development and Science and Technology, NCEP, NESDIS Office of Research and Applications, OAR Headquarters and five laboratories (ETL, NSSL, CDC FSL and AL), USWRP, and Office of Global Programs. The HMT is envisioned as a key project to accelerate the transfer of hydrometeorological research into operations by providing a testbed to evaluate new observational technologies, data assimilation and modeling techniques, as well as forecasting methods, and to facilitate development of improved understanding of key physical processes. The discussions spanned time scales ranging from nowcasts to seasonal forecasts. It was concluded that many elements of NOAA could benefit from a well-designed and implemented HMT, and that it is a critical component of any NOAA water-related initiative. It was also decided that a fleshed out plan should be developed, and a steering committee would be formed to do so. A list of critical areas for research and its transition to operations was developed that included as a high priority the development of the capability for probabilistic estimates and forecasts of precipitation and stream flow. It was emphasized that a link with the US Climate Change Science Plan and the Office of Global Programs is critical.

### **December 2002:**

A NOAA HMT Working Group has been established to develop the initial plan for an HMT to ensure it meets NOAA's needs, and benefits from NOAA's in-house expertise. Following the formulation of NOAA's core HMT effort, other agency input will be gathered later in 2003. As of 20 December 2002, the working group members represent the following NOAA organizations:

OAR:            Environmental Technology Laboratory (Marty Ralph, co-chair)  
                 National Severe Storms Laboratory (Kevin Kelleher)  
                 Climate Diagnostics Center (Robin Webb)  
                 Forecast Systems Laboratory (Tom Schlatter)  
                 Aeronomy Laboratory (Ken Gage)  
                 OAR Headquarters (Roger Pierce)  
                 Office of Global Programs (Jin Huang)  
                 US Weather Research Program (Dave Jorgensen)

NWS:           Office of Hydrologic Development (Rich Fulton, co-chair)  
                 Office of Science and Technology (Nelson Seaman)  
                 NCEP/Hydrometeorological Prediction Center (Jim Hoke)  
                 California/Nevada River Forecast Center (Rob Hartman)  
                 Weather Forecast Offices (Dave Reynolds)

NESDIS:       Office of Research and Applications (Bob Kuligowski)

Joint Institutes:    CIASTA/DRI (Dave Kingsmill)